

Off-Road Implementation Advisory Group



May 7, 2009

Sacramento General Meeting

Meeting Agenda

- Implementation Update
 - Reporting
 - Outreach
 - Safety
 - New DECS Verifications
- Legislative Amendments
 - BACT Changes
 - New Provisions for Early Credit
- Subcommittee Meeting Summaries
 - Fleets, DOORS, DECS

Reporting



Reporting Timeline

- Currently in the middle of the reporting cycle
- Large fleets deadline – April 1, 2009
 - Large fleets continue to report
- Upcoming Deadlines
 - Medium fleets – June 1
 - Small fleets – August 1



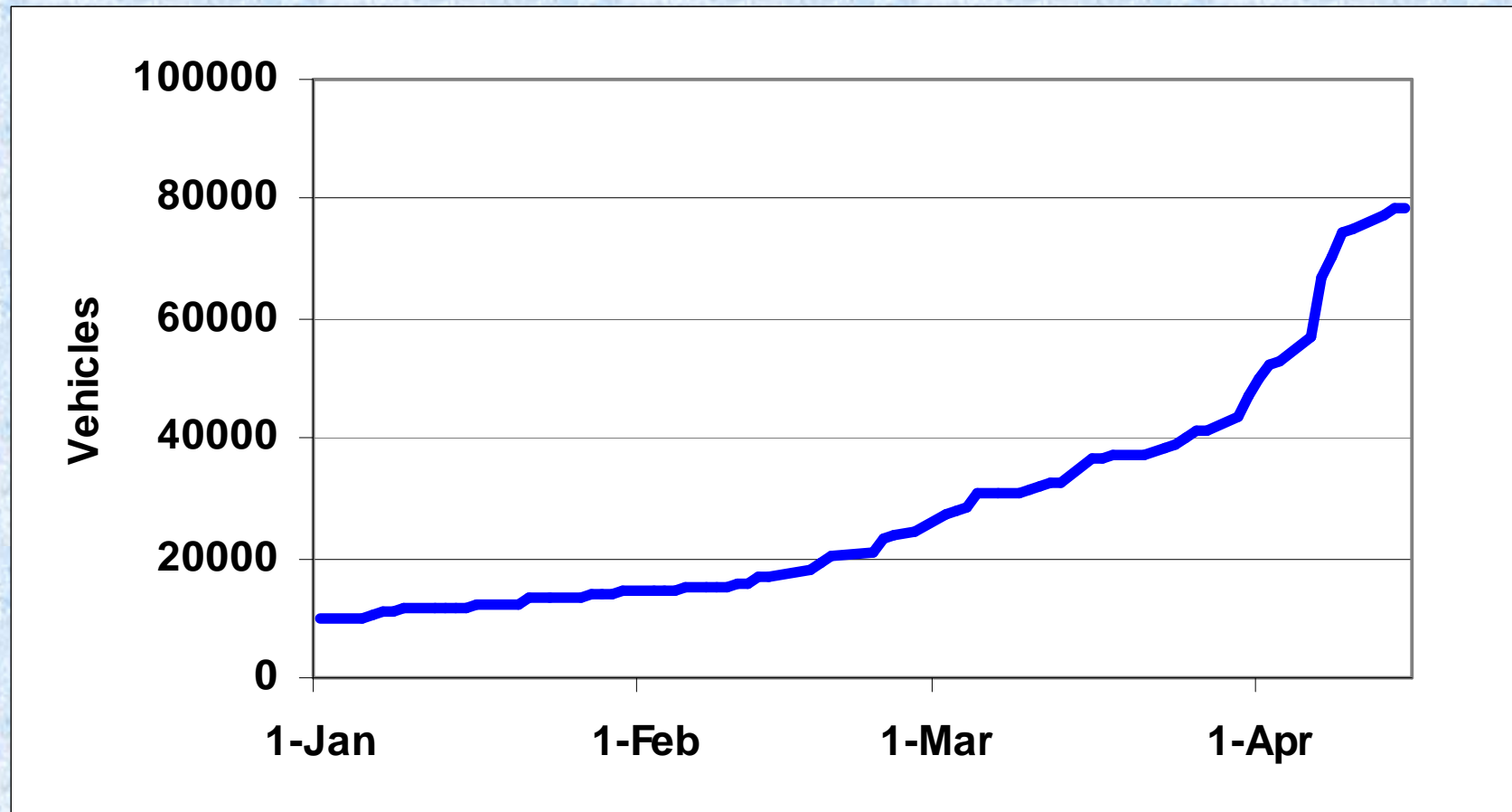
Reporting Data so Far

- As of May 1, 2009, reporting data has accepted for
 - 81,000 Vehicles
 - 1,350 Fleets
- Additional information in the system
 - 12,000 Vehicles
 - 1,400 Fleets



Vehicles Reported

January 1, 2009 to April 15, 2009



Submittals and Data Review

- Approximately 2750 fleets using DOORS
- Roughly 90 requests for hardcopy forms
- Fleets reviewed for:
 - Completeness (serial numbers, model years)
 - Understanding the fields (engine family)
 - FAQs, guides, suggestions sent out in response

California Environment & Natural Resources
AIR RESOURCES BOARD In-Use Off-Road Diesel Vehicle Regulation
Initial Reporting Forms
INCLUDE THIS PAGE WITH YOUR COMPLETED FORMS

Mail the completed forms to the following address:

ATTN: OFF-ROAD DIESEL REPORTING
Air Resources Board
1001 I St. P.O. Box 2815
Sacramento, CA 95820

Check off all that apply:

I have included the following forms with this report:

☒ Contact Information
☒ Owner Information
☒ Vehicle Information
☒ Engine Information

REQUIRED FORMS

I have also included the following forms (check below if you have filled out and included the following forms):

☐ VDECS Information (if you have ARB-verified exhaust retrofits installed on your vehicles)

☐ Repowered Engines (required to report and receive credit for vehicles repowered to Tier 1 or higher)

☐ Carl Moyer, SOON, or other Incentive/Demonstration Project Vehicles

☐ Alternative Fuel Vehicles or Non Standard Engine Certification Forms

☐ Stationary or Portable System Used in Place of Off-Road Diesel Vehicles

Additional Information:

☐ I would like to sign up to receive more information or changes about the off-road regulation in the mail

☐ I would like to receive more information about the off-road regulation at my email address _____

State of California
Air Resources Board
MCR-DVDR-002-10 (Rev 9/08)

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Certificate of Reported Compliance



Reporting Statistics

- ARB is reviewing the reporting data
- What types of summaries, analyses would be most useful?

Outreach



Outreach

- Statewide training sessions
- Speaking to interested groups
- Mailings



Training Seminars

- 2,090 attendees at the 22 state-wide training seminars across the state
- For future trainings staff is looking at:
 - Frequency
 - Class size
 - Locations (Sacramento, Fresno, and Los Angeles area only?)
 - Special trainings on the compliance planning tool
- Input is welcome

Speaking to Interested Groups

- **In the past several months, groups include :**

Contractors associations • Builders associations • Groundwater drilling • Telephone contractors • Equipment dealers • Golf courses • Cemetery groups • Mining industry • Landfill and recycling centers • Logging industry • City and municipal small business association • County fleet managers • West coast equipment shipping and distributors and others.

- **Looking for more...**

Mailings and Outreach

- CSLB – all licensed contractors will receive a flyer with their renewal notice
- Did mailings to golf courses, cemeteries, dealers
 - Working on waste, retail, specialty contractors, more
- Poster and flyers available to dealers, others
- Radio spots on country music stations
- Additional ideas?

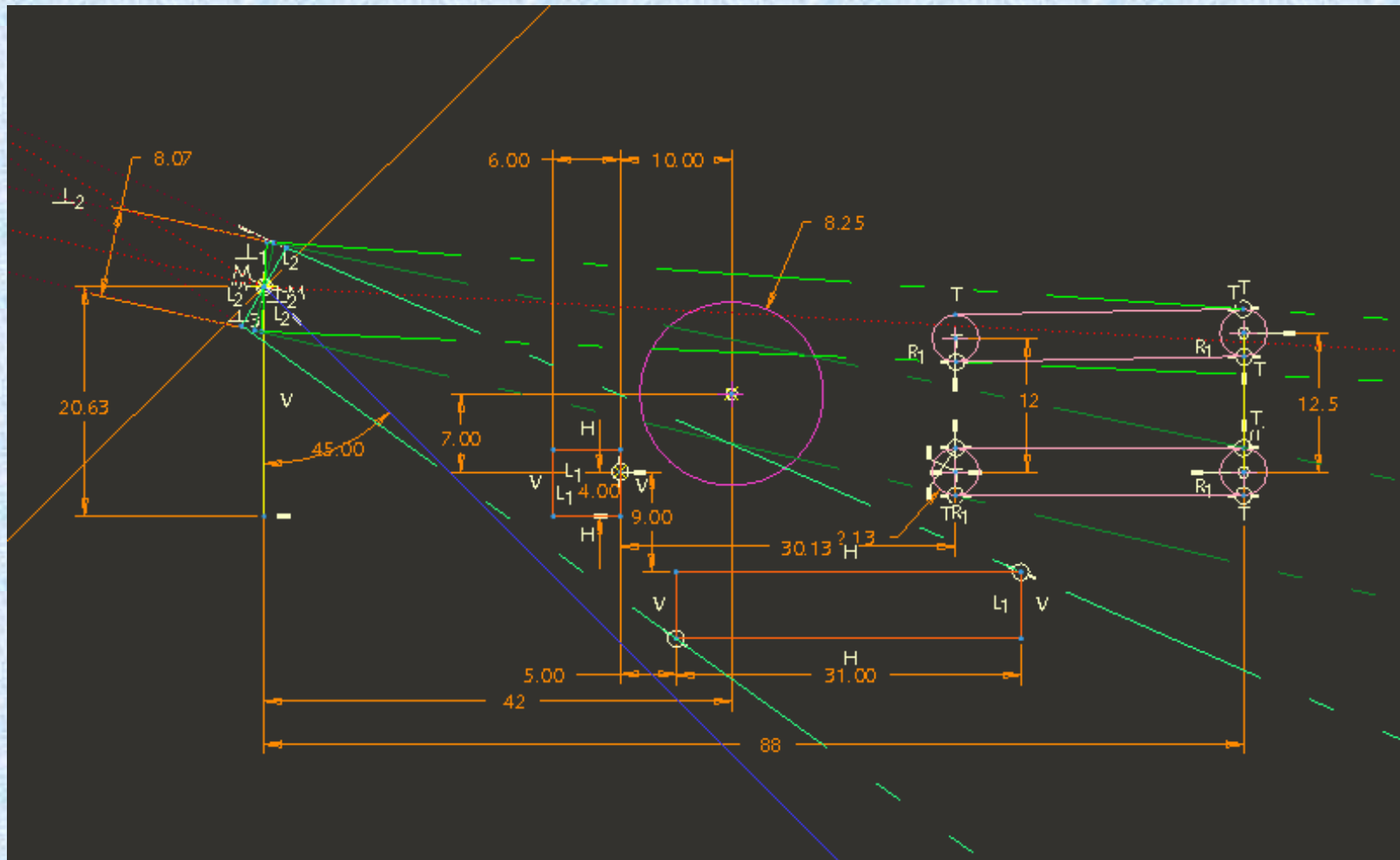
Guides, FAQs, Definitions

- Vehicle applicability
 - On-road, Agriculture, Rail, Portable, more..
- Credit provisions
 - Low use, Early credit
- Enforcement advisories
 - Idling, Disclosure, Reporting, Idling Policy, Adding Tier 0s

www.arb.ca.gov/msprog/ordiesel/knowcenter.htm

What are other fleets asking ORIAG members?

Safety



Safety

- ARB has proposed amendments to Title 8 regarding retrofit safety
- OSHSB has reviewed the proposed amendments & will discuss with ARB staff in the near future
- Once OSHSB proposes amendments to its Board, there will be a 45 day public comment period
- Upon completion of the public comment period, there will be an OSHSB Board hearing

ARB's Goals for Safety

- Prevent harm to operators with objective, measurable criteria for safety issues
- Prevent any conflict of Cal/OSHA and ARB requirements for fleets
- Clear, consistent guidelines

Safety Proposal Details

- ARB proposes use of ISO5006 as visibility standard
 - Specific criteria for impact on field of vision
 - Defined by interruption of sight of operator
 - Objective analysis could be performed by registered professional engineers
- Additional provision for exhaust safety
- Under ARB's proposal, if a registered PE well-versed in construction safety certifies the vehicle cannot safely be retrofit, then it is exempt

Devices Verified or Verifications Expanded

- **Caterpillar DPF** – Expanded Oct 24, 2008
 - Passive System
 - Rubber tired restriction lifted
 - HP cap raised to 600 HP
- **Cleaire Lonestar** – Conditionally Verified Dec 23, 2008
 - NOx (40%) and PM
 - Passive system
- **Cleaire Phoenix** – Conditionally Verified Mar 20, 2009
 - Active System
- **ECS Purifilter** – Conditionally Verified Oct 20, 2008
 - Passive System

Additional VDECS Available

Active Systems

- Cleaire Horizon
- ECS Combifilter
- HUSS Umwelttechnik FS-MK

Passive Systems

- DCL MINE-X Sootfilter



AB8 2X Legislatively Directed Changes



Legislatively Directed Changes

- As part of the budget negotiations, the California Legislature directed ARB to modify the Off-Road Regulation
 - Not self-implementing – requires staff to develop regulation language
-
- ❖ Change to 2011 to 2013 BACT requirements
 - ❖ Additional credit for retirements from 2006-2010
 - ❖ Credit for reduced activity from 2007-2010

Legislatively Directed Changes

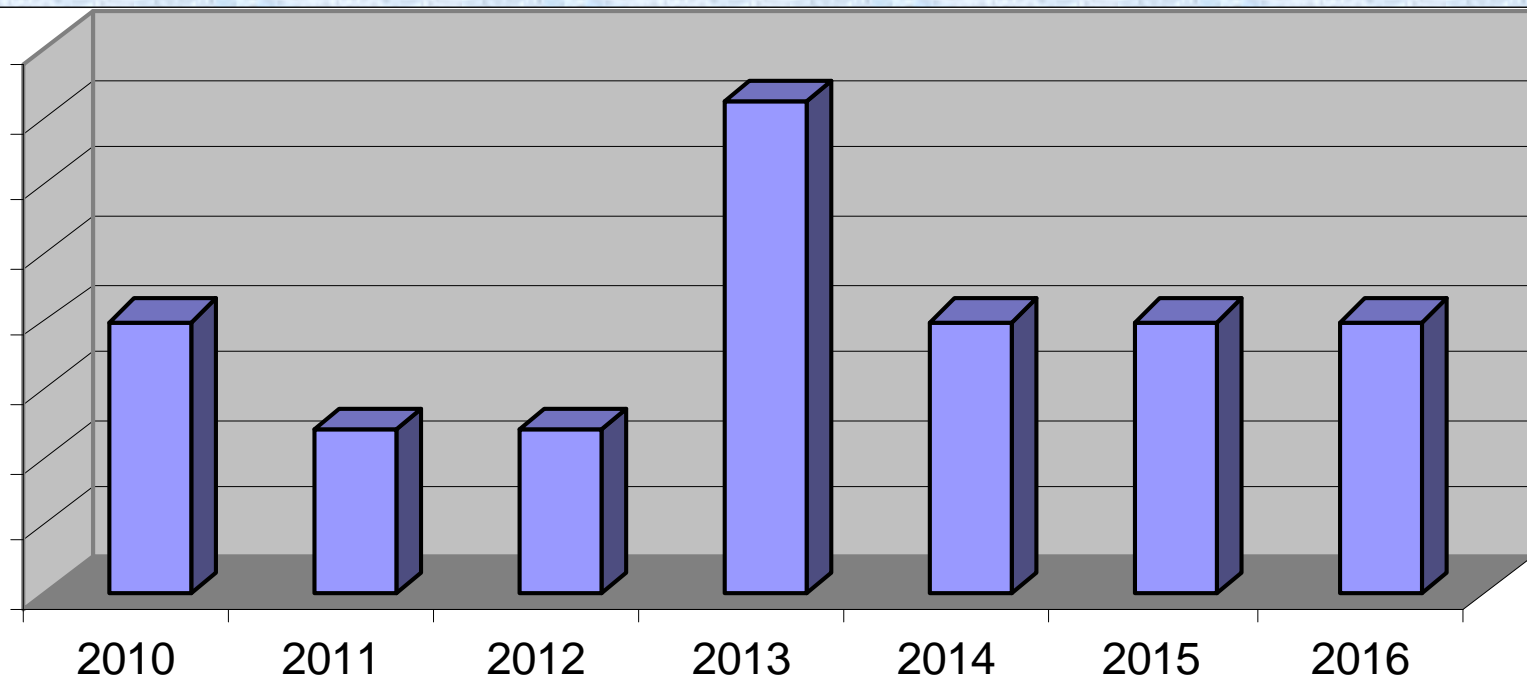
- Purpose of three new provisions
 - Each may reduce the stringency of the regulation in initial years for fleets affected by the economic climate
- Two workshops:
 - April 7 in Sacramento
 - April 29 in Diamond Bar
- Excellent feedback received, but some questions remain

Legislatively Directed Changes

- Staff report tentatively scheduled:
June 5, 2009
- Board hearing on the proposed amendments:
July 23/24, 2009

Legislatively Directed Changes: 20-20-60 BACT Changes

- Few or no questions/suggestions on interpretation
- Fewer actions required in 2011 and 2012, requirements added to 2013.



Revised BACT Schedule

(% Required Turnover / % Required Retrofit)

	2010	2011	2012	2013	2014
Previously	8 / 20	8 / 20	8 / 20	8 / 20	8 / 20
With changes	8 / 20	4.8 / 12	4.8 / 12	14.4 / 36	8 / 20

Legislatively Directed Changes: Credit for Reducing Horsepower

- Credits overall reduction in horsepower from March 1, 2006 to March 1, 2010
- At the workshops, staff proposed limiting to the fleet's oldest vehicles first
- Based on stakeholder input, now proposing to credit retirement of any vehicle (regardless of Tier)



Legislatively Directed Changes: Credit for Reduced Activity

- “Average annual hours”
 - ARB proposes to include horsepower in calculation
 - 12 month period to determine average annual hours
- “Between July 1, 2007, and March 1, 2010”
 - Average of July 1, 2007 activity is
January to December of 2007
 - Average of March 1, 2010 activity would be
Sept 2009 to August 2010
 - As fleets need to use the activity in March 2010, staff propose March 2009 to February 2010 as the second time period instead

Legislatively Directed Changes: Credit for Reduced Activity

- Records to show reduced activity
 - Hour meter and logs for each vehicle
 - Payroll/operator records
 - Maintenance logs
 - Overall fleet fuel use
 - Overall financial records
- Not all records equally reflect actual vehicle activity.

Legislatively Directed Changes: Credit for Reduced Activity

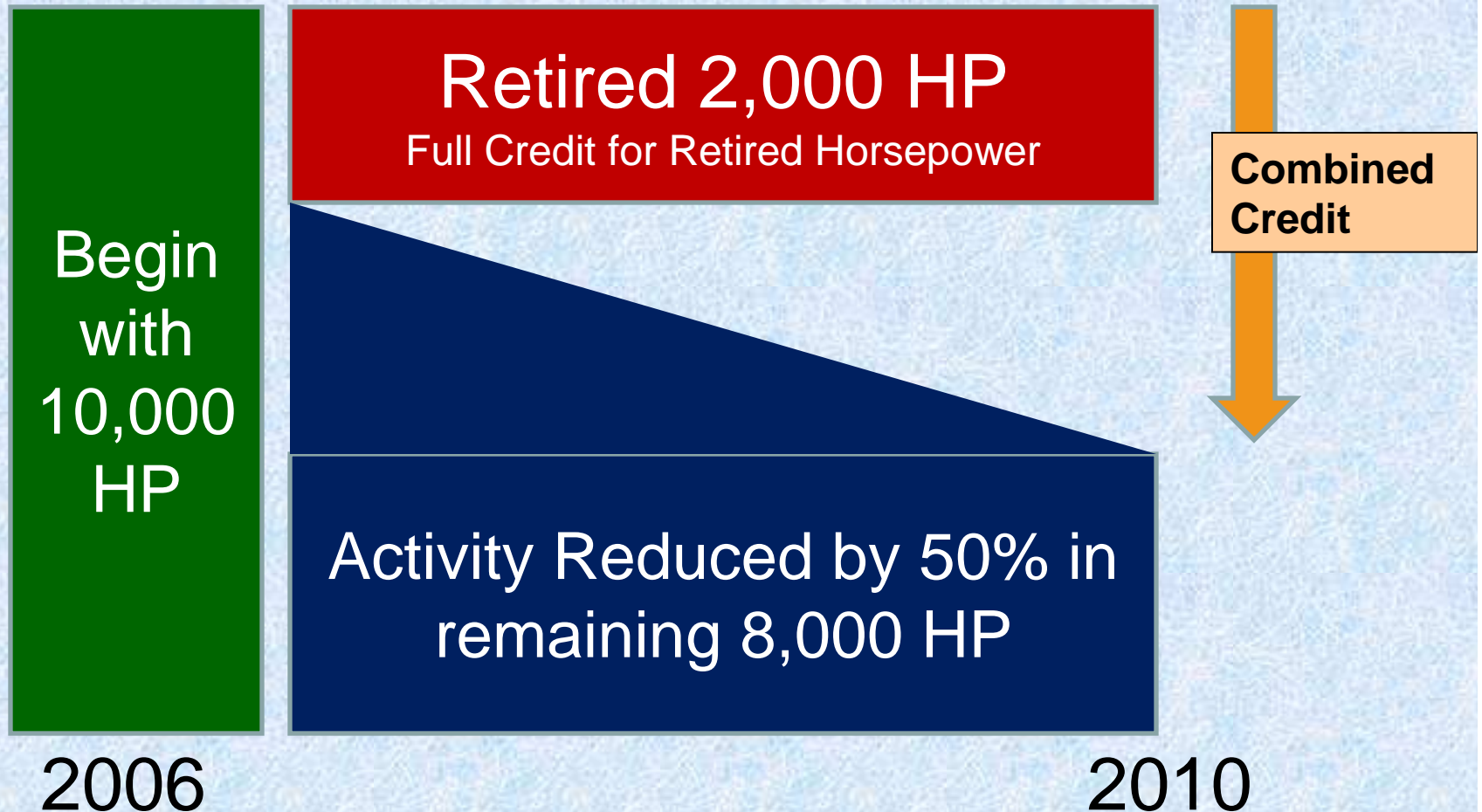
- Staff's proposal
 - Full credit for complete records, such as hour meter logs, and possibly operator hours if vehicles are identified
 - To prevent awarding no credit for fleets without records for each vehicle, some credit awarded
 - Proposal – up to 15% credit for those with some records or means to demonstrate activity reduction

Combination of Credits

- For fleets with retirements and reduced activity, possibly count as:
 - Determine reduced activity in portion of fleet that was not retired
 - Would require records for each vehicle, not just overall fleet indicators

Combination of Credits

Example of Possible Solutions



- End with: 2,000 + 4,000 HP credit to PM & NOx

Additional Ideas to Spur Early Action

Proposed

- Double credit for NOx retrofits
- Lifetime turnover exemption for retrofit vehicles

What else would spur actions?

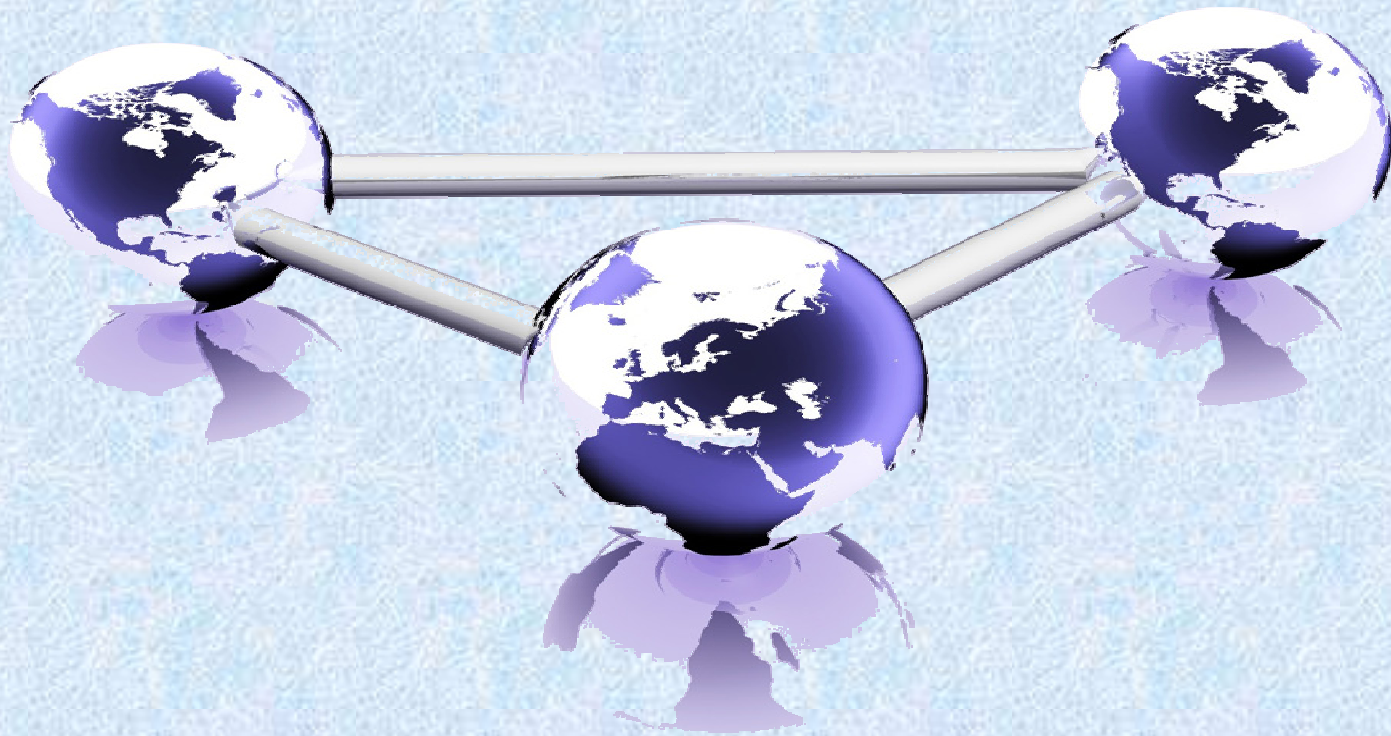
Complexity of Credit Options

- Reduced activity
- Retirement in a shrinking fleet
- Turnover over 8% per year on average
- Repowers
- Retrofits (double credits)

How can ARB work with fleets to clarify and help select an option?

Subcommittee Reports

Fleets • DOORS • DECS



Fleets Subcommittee



- Dave Porcher: Chair

DOORS Subcommittee



- Jeff Wilson: Chair

Diesel Emission Control Strategies (DECS) Subcommittee



- Charlie Cox: Chair

Off-Road Contacts

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(916) 323-2397

Diesel vehicle information hot line:

(866) 6-DIESEL

(866) 634-3735

Safety:

Beth White, Staff

eiwhite@arb.ca.gov

(916) 324-1704

DOORS

doors@arb.ca.gov

(877) 59-DOORS

Carl Moyer Program:

Dinh Quach

dquach@arb.ca.gov

(626) 350-6485

Off-Road Regulation - www.arb.ca.gov/msprog/ordiesel/ordiesel.htm

Verified Devices - www.arb.ca.gov/diesel/verdev/verdev.htm

Carl Moyer Program - www.arb.ca.gov/msprog/moyer/moyer.htm